



MODIS contribution to NACP

MODIS

Land break-out

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OUTLINE



- Background and realities
- MODIS-land contribution
- MODIS-land participation in mid-continent intensive campaign(s)
- Conclusions



Background



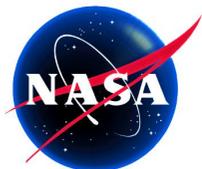
- Several MODIS-land team members and associates are involved with NACP in some way
 - Specific projects
 - Science steering group
 - Inter-agency working group
- NACP will rectify “top-down” and “bottom-up” approaches to derive continental carbon budgets.
 - “TD w/out BU is unexplained”
 - “BU w/out TD is unvalidated”
(Dave Schimel)
- MODIS-land data contribute significant input for BU modeling as well as for TD analyses.



Realities



- Little *specific* funding within the MODIS science team for NACP
- No specific funding for an NACP data system
- Wide range of remote sensing/MODIS experience among the NACP funded investigators



MODIS-land contribution



- Nearly all currently available MODIS land products provide information useful to carbon studies
- Some value-added distribution could help integrate the currently available products into NACP efforts
- Several key products are not currently available but could potentially be derived from MODIS data



Value-added services



- Mosaics for intensive study areas
- Reprojecting
- Reformation
- Unpacking and filtering QA bits
- Subsetting specific data layers

LP DAAC and ORNL have tools and the capability, but limited resources

Could be a test case for the LADS system



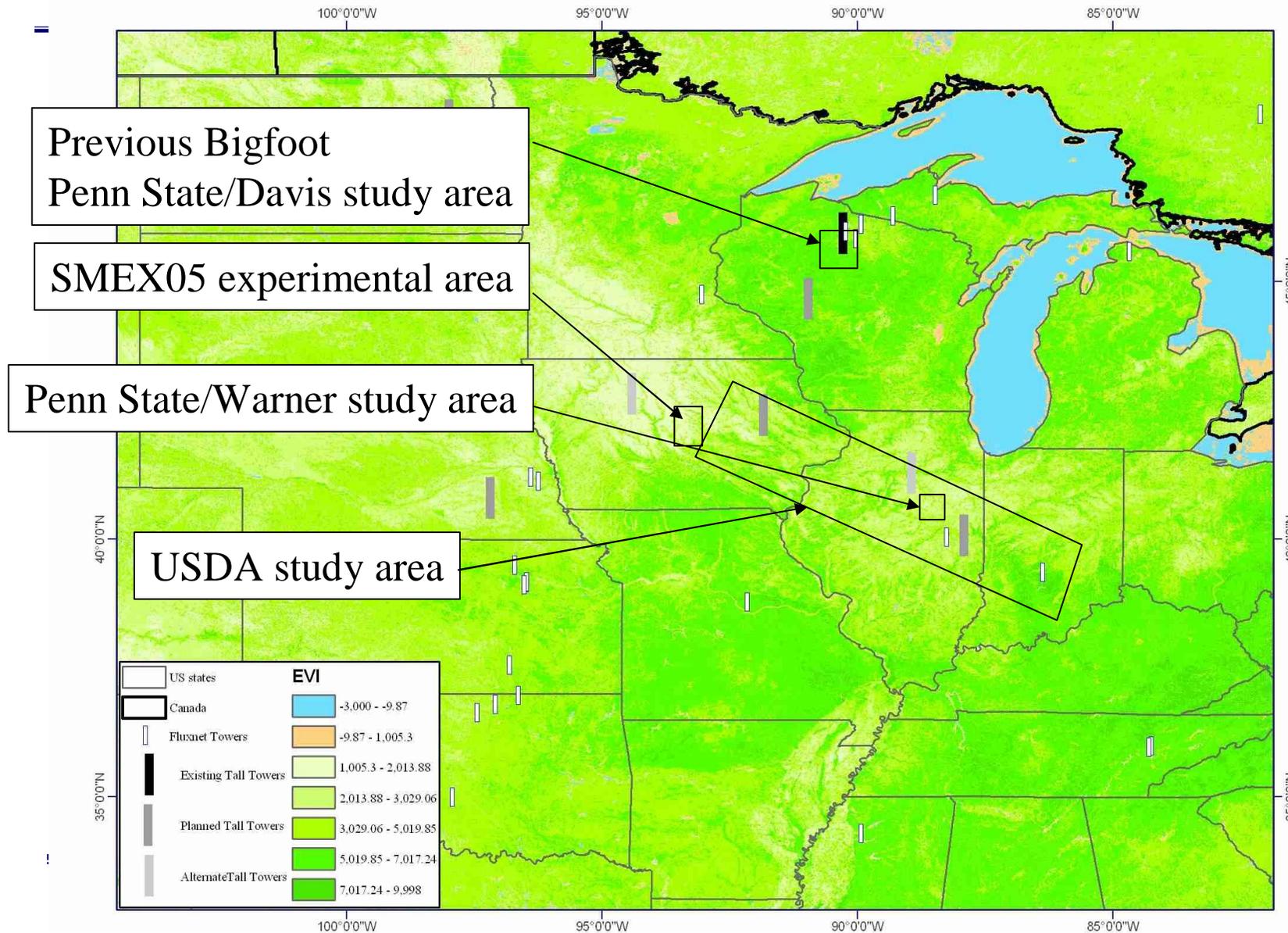
Key products still needed



- Improved agricultural maps
 - Crop type
 - C3/C4 continuous fields map
- Wetlands map
- Urban areas
- Disturbance map (30+ year scale)
- Forest stand age
- Fire emissions
- 250m LAI/fPAR/NPP products



MODIS validation opportunities with mid-continent intensive





Conclusions



- Participation in the mid-west intensive field campaigns as a validation activity seems feasible
- Value-added products could make a big impact but will require juggling limited resources
- Some interesting new products are needed but not currently funded